UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

\sim	1	O	-	n

7590

01/28/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314

EXAMINER

RAJAN, KAI

ART UNIT PAPER NUMBER

3769

DATE MAILED: 01/28/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,930	02/10/2006	Yasushi Miyajima	285627US6PCT	5384

TITLE OF INVENTION: IMAGE DISPLAY SYSTEM, IMAGE DISPLAY DEVICE, IMAGE DISPLAY METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/28/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 22850 01/28/2010 Certificate of Mailing or Transmission OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L. Phereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 1940 DUKE STREET ALEXANDRIA, VA 22314 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/567,930 02/10/2006 Yasushi Miyajima 285627US6PCT 5384 TITLE OF INVENTION: IMAGE DISPLAY SYSTEM, IMAGE DISPLAY DEVICE, IMAGE DISPLAY METHOD APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 04/28/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS RAJAN, KAI 3769 600-300000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/567,930	02/10/2006	Yasushi Miyajima	285627US6PCT	5384	
22850 75	22850 7590 01/28/2010		EXAMINER		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET			RAJAN, KAI		
			ART UNIT	PAPER NUMBER	
ALEXANDRIA, VA 22314		3769			
			DATE MAILED: 01/28/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/567,930	MIYAJIMA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	 Kai Rajan	3769	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet (OR REMAINS) CLOSEE) or other appropriate com IGHTS. This application i 3 and MPEP 1308.	in this application. If not included munication will be mailed in due course. To subject to withdrawal from issue at the in	HIS itiative
1. This communication is responsive to <u>the correspondence</u>	received November 24, 20	<u>009</u> .	
2. X The allowed claim(s) is/are 1-4,6-14,16-21 and 23-35.			
 3. Acknowledgment is made of a claim for foreign priority u a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	e been received. e been received in Applica	tion No	:he
* Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	MENT of this application.		
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv			F
5. CORRECTED DRAWINGS (as "replacement sheets") must	st be submitted.		
(a) I including changes required by the Notice of Draftspers	_	ew (PTO-948) attached	
1) hereto or 2) to Paper No./Mail Date	-		
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s)			
1. Notice of References Cited (PTO-892)		Informal Patent Application	
 Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO/SB/08), 	Paper N	Summary (PTO-413), o./Mail Date 's Amendment/Comment	
Paper No./Mail Date			
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 		's Statement of Reasons for Allowance	
Wai Bajan	9. Other	 hncon_III/	
/Kai Rajan/ Examiner, Art Unit 3769	/Henry M. Jo Supervisory F	nnson, III/ Patent Examiner, Art Unit 3769	

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Johnny Ma on January 15, 2010.

Claims 19, 25, 26, 30, 31, and 35 have been amended to read as follows:

19. A method of an image display device for displaying an image, the method comprising: receiving, by the image display device, via a network, bio-information on each of a plurality of persons under measurement;

generating, by a processor in the image display device, an image including objects that interact with each other on the basis of relationships among the bio-information of the plurality of persons under management received in the receiving; and displaying the image generated in the generating.

25. An image displaying system, comprising:

a plurality of bio-information acquiring devices including

a bio-sensor configured to measure bio-information on each of a plurality of persons under measurement, and

a first communications interface configured to transmit the bio-information; and an image display device including

a second communications interface configured to receive the bio-information on the plurality of persons under measurement, transmitted from each of the plurality of bioinformation acquiring devices,

an image generating processor configured to generate an image including objects that interact with each other on the basis of relationships among the bio-information on the plurality of persons under measurement received by the second communications interface, and

a display unit configured to display the generated image,

wherein the plurality of bio-information acquiring devices and the image display device are located in different places and connected to each other via a network.

26. An image display device connected, via a network, to a plurality of bio-information acquiring devices configured to acquire bio-information on each of a plurality of persons under measurement, the image display device comprising:

Application/Control Number: 10/567,930

Art Unit: 3769

a communications interface configured to receive the bio-information on the plurality of persons under measurement transmitted from each of the plurality of bio-information acquiring devices;

Page 4

an image generating processor configured to generate an image including objects that interact with each other on the basis of relationships among the bio-information of the plurality of persons under measurement received by the bio-information receiving unit; and a displaying unit configured to display the generated image.

- 30. The image displaying system according to claim 25, wherein the image generating processor is configured to generate the image based on a comparison between the bio-information on the plurality of persons under management received by the second communications interface.
- 31. The image display device according to claim 26, wherein the image generating processor is configured to generate the image based on a comparison between the bio-information of the plurality of persons under management received by the communications interface.
 - 35. The image displaying system according to claim 25, wherein

Art Unit: 3769

the system is configured to estimate emotions of the plurality of persons under measurement based on the bio-information received by the receiving unit, and the image generating processor is configured to generate the image based on the emotions estimated by the emotion estimating processor.

The following is an examiner's statement of reasons for allowance:

In light of the interview conducted between Examiner and Applicant's Representative on January 5, 2009, the Examiner reviewed the applied prior art, and agrees with Applicant that the claims presented on May 19, 2009 are patentable over the applied prior art.

The Examiner agrees that the applied prior art alone or in combination fails to disclose "generating an image including objects that interact with each other on the basis of relationships among the bio-information on the plurality of persons under measurement received by the receiving means." The prior art applied September 18, 2009, Blattner et al. in view of Hata et al., fail to disclose the aforementioned elements. In Blattner et al. as well as other art, avatars are animated based on user input and reactions to other user input. However, the generated images in the prior art do not include objects *interacting* with each other. Furthermore, the images generated do not represent a *relationship* between the bio-information of multiple people, but instead display of bio-information of individual people as separate avatars on a screen, or an image showing the reaction of one avatar to another avatar's data. Prior art showing reactions, such as Blattner et al., result in an image representing an analysis of one person's bio-information, and not a relationship among the bio-information on a plurality of persons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/ Examiner, Art Unit 3769 /Henry M. Johnson, III/ Supervisory Patent Examiner, Art Unit 3769

Page 6

January 20, 2010